

4. Mobile manufacturing equipment of organic fertilizer as claimed in claim 1, wherein the aforementioned vehicle is pulling trailer.

5. Mobile manufacturing equipment of organic fertilizer as claimed in claim 1, wherein the aforementioned vehicle is ready mixed concrete truck.

6. Mobile manufacturing equipment of organic fertilizer as claimed in claim 1, wherein the aforementioned mixing reactor is drum mixer of ready mixed concrete truck.

7. Mobile manufacturing method of organic fertilizer from organic matter including organic wastes, the method comprising the steps of:

(a) suction collection of organic matter into mixing reactor by suction pump;

(b) additive adding 5 to 100 parts by weight of quick lime, light burnt dolomite, light burnt magnesite or these mixture based on 100 parts by solid weight of organic matter to mixing reactor;

(c) mixing reaction of organic matter and additives in mixing reactor;

(d) dealkalinizing step of carbonating reaction by introducing exhaust gas of vehicle to mixing reactor;

(e) sprinkling step of organic fertilizer dealkalinized in mixing reactor to soils by discharge pump;

(f) processing step of organic fertilizer discharged by discharge pump to dry, granulate.

8. Mobile manufacturing method of organic fertilizer as claimed in claim 7, in the step of (b), adding one or more desalters selected from the group consisting of calcium carbonate, calcium chloride and gypsum material.

9. Mobile manufacturing method of organic fertilizer as claimed in claim 7, in the step of (b), adding one or more ingredient improvers selected from the group consisting of iron work slag, wollastonite powder, clay, zeolite, diatomite, bentonite, sawdust, nitrogen, phosphate, potassium, organic matter.

10. Mobile manufacturing method of organic fertilizer as claimed in claim 7, in the step of (b), adding one or more deodorizers selected from the group consisting of charcoal, active carbon, zeolite, diatomite and bentonite.

Abstract

[77] The present invention is a mobile manufacturing equipment and its manufacturing method of organic fertilizer using organic matter including organic wastes of livestock excrements and abattoir wastes, food wastes, night soil, agricultural and fishery wastes, sewage and septic tank sludge, etc.

[78] The mobile manufacturing equipment is installed in vehicle of cargo truck and tractor trailer and consists of mixing reactor for stabilizing reaction of organic matter, suction and/or discharge pump for suction collection of organic matter into and discharge or sprinkling of organic fertilizer from mixing reactor, and additive device for additive adding into mixing reactor.

[79] Further, the mobile manufacturing equipment employs a ready mixed concrete truck with installation of a pump for suction collection of organic matter and discharge of organic fertilizer. This truck has the many advantages of easy purchase and maintenance, the high mixing efficiency of drum mixer, low investment and operating cost.

[80] The mobile manufacturing method comprises the steps of suction collection of organic matter into mixing reactor by pump; adding additives; introducing vehicle exhaust gas; mixing reactions of hydration, carbonation, desalting reaction and deodorization on the way of transport; sprinkling organic fertilizer to farm land or discharge to a place for processing to dry and granulation.

[81] The present invention simplified manufacturing equipment and its process to a great extent enabling to curtail investment and production cost, and removes and settles most of the difficult problems in actual application of existing technologies.

[82] In conclusion, the present invention enables to recycle environmental contamination material of organic matter into a weak alkaline, desalted, odor free, visual unrepulsive and calcium enriched organic fertilizer during its transport by vehicle with no plant facilities.

[83] The inventor wishes the present invention could contribute for the improvement of our environment as well as organic farming using everywhere by everyone as a natural good circulation system.